

REMARKS

In the Office Action dated February 16, 2010, the Examiner rejects claims 49 and 54-60 under 35 U.S.C. §103(a). With this Amendment, Applicants have added new claims 61-84. Claims 1-60 are canceled. After entry of this Amendment, claims 61-84 remain pending in the Application. Reconsideration of the Application as amended is respectfully requested.

Claim 61 describes a method of compressing a current block of pixels of at least one frame of video data. The method includes examining a plurality of candidate motion vectors, wherein each of the plurality of candidate motion vectors corresponds to a predetermined set of prior-coded blocks in the at least one frame, selecting a first vector of the plurality of candidate motion vectors as the first reference vector when the first vector is at least one of coded with respect to the same reference frame as the current block and has a non-zero value, selecting a second vector of the plurality of candidate motion vectors as the second reference vector when the second vector is at least one of coded with respect to the same reference frame as the current block and has a non-zero value and determining whether to use at least one of the first reference vector and the second reference vector for coding the current block.

In the Office Action dated February 16, 2010, the Examiner used various combinations of Matsumura et al. (US 6,125,144), Okumura et al. (US 6,414,995), Mukerjee et al. (US 7,116,831) and Wu et al. (US 6,418,166) to reject canceled claims 49 and 54-60. However, none of these references, either alone or in any combination, teach or suggest the features of claim 61. For example, none of these references teach or suggest selecting first and second vector as the first and second reference vectors, respectively, or determining whether to use at least one of the first reference vector and the second reference vector as described in claim 61.

Okumura discloses using motion vectors of the block above and the block to the right of the block to be predicted (Col. 4, ll. 10-12) or in other instances the block to the upper left or upper right of the block to be predicted (Col. 4, ll. 12-14). There is no determination as to what factors (e.g. reference frame of reference block or value of motion vector of the reference block) should be used to select these reference blocks; the reference blocks in Okumura are

always the same blocks. Neither Okumura, Mukerjee nor Wu teach or suggest the features of claim 61. Accordingly, Applicants respectfully submit that claim 61, and its dependent claims 62-69, are allowable.

Claim 70 describes a method of encoding a current block in at least one frame of video data, which includes calculating a new motion vector for the current block, selecting at least one reference motion vector from a predetermined set of prior-coded blocks in the at least one frame, comparing the new motion vector and the at least one reference motion vector, selecting a coding mode from a selection of coding modes based on the comparison; and encoding the selected coding mode for the current block.

None of these references cited in the previous Office Action teach or suggest selecting a coding mode for the current block from a selection of coding modes. The Examiner previously cited Matsumura for the teaching of coding modes. However, Matsumura discloses a picture coding method that, for example, prevents decoding errors found in compressed data by intra-picture coding (or INTRA mode coding) one or more partitions in a frame so that it can be refreshed (i.e. intra-picture coded) in the next frame. (Col. 2, ll. 53-64; Col. 9, ll. 8-13). Specifically, that method refreshes the partitions based on, for example, a calculated temporal change amount such as a position-fixed differential data variance. (Col. 9, ll. 33-41). Matsumura does not disclose selection of coding modes as described in claim 70. Although Matsumura uses the term "coding mode" to refer to INTER mode or INTRA mode, these coding modes do not indicate which *motion vector* (or if any motion vector) should be used during the coding process as required by step c) of claim 61. The coding modes in Matsumura indicate which *frame* should be used during coding. Specifically, Matsumura teaches that in the INTER coding mode, coding is performed between consecutive frames and in the INTRA coding mode, coding is performed within the same frame. (Col. 1, ll. 13-24). There is no selection of coding modes in Matsumura. Accordingly, the coding modes described in claim 70 are not equivalent to the coding modes of Matsumura.

Neither Okumura, Mukerjee nor Wu remedy these deficiencies in Matsumura. Accordingly, for these reasons and for similar reasons discussed above in connection with claim 61, Applicants respectfully submit that claim 70, and its dependent claims 71-77, are allowable.

Claim 78 describes a method for decoding compressed video information including at least one frame with a plurality of blocks. The method includes reading a coding mode for a current block from the video information, determining whether to select at least one reference motion vector from a predetermined set of prior-coded blocks in the at least one frame based on the coding mode, selectively selecting the at least one reference motion vector based on the determination including: examining a plurality of candidate motion vectors, wherein each of the plurality of candidate motion vectors corresponds to the predetermined set of prior-coded blocks in the at least one frame and selecting a first vector of the plurality of candidate motion vectors as the at least one reference vector when the first vector is at least one of coded with respect to the same reference frame as the current block and has a non-zero value.

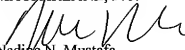
For similar reasons as discussed above in connection with claims 61 and 75, Applicants respectfully submit that claim 75, and its dependent claims 75-80, are allowable.

New claims 61-84 are supported by the application as filed at least at paragraphs [0147]-[0162]. Further, it is submitted that this Amendment has antecedent basis in the Application as originally filed, including the specification, claims and drawings, and that this Amendment does not add any new subject matter to the Application. Reconsideration of the Application as amended is requested. It is respectfully submitted that this Amendment places the Application in suitable condition for allowance; notice of which is requested.

If the Examiner feels that prosecution of the present Application can be expedited by way of an Examiner's amendment, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,

YOUNG BASILE HANLON &
MACFARLANE, P.C.



Nadine N. Mustafa
Registration No. 59755
(248) 649-3333